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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,069	06/01/2001	Karim Mhirs	1-1-7	3982

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EXAMINER

PATEL, JAY P

ART UNIT PAPER NUMBER

2666

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/873,069

Applicant(s)

MHIRSI ET AL.

Examiner

Jay P. Patel

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/1/01
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in United Kingdom on June 6<sup>th</sup>, 2000. It is noted, however, that applicant has not filed a certified copy of the foreign application as required by 35 U.S.C. 119(b).

### *Title – Informalities*

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: **RADIO COMMUNICATION SYSTEM USING WIDEBAND CODE DIVISION MULTIPLE ACCESS (WCDMA).**

### *Drawings*

3. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. Furthermore, the descriptions for figures 1 and 2 are located in the Description of the Prior Art section. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **the correlation means comprising multiplying means for multiplying the signal arriving at each input with a coefficient determined by said locally generated code, summing means for summing the resultant products for each said inputs, and threshold means for monitoring when each sum exceeds a predetermined threshold to provide a indication of correlation** claimed in claim 2 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant

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will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections – Informalities***

4. Claims 2 and 3 are objected to because of the following informalities:

The above-mentioned claims are dependent on independent claim 1; therefore, they should begin with "The" instead of "A". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1 through 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Regarding claim 1, the terms "P" and "N" of claim 1 are not clearly defined by the claim, which render the claim indefinite. For instance, if the number of antennae P is equal to zero, the multiplexer will not receive any inputs; if N equals zero, the correlation means will be rendered useless.

***Allowable Subject Matter***

8. Claims 1 through 3 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

9. The following is an examiner's statement of reasons for allowance:

Claim 1 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly point disclose, a multiplexing

system for multiplexing the outputs of the antennae at a rate of P times the sampling rate so that the first sample taken from the output of each of the P antenna occurs in a succession of P first samples followed by the P second samples and so on progressively with subsequent samples, a tapped delay line having P X N serially connected elements connected to the output of the multiplexer system with each Pth element having a tapped output, and a N input correlation means connected to the outputs of the delay line and operative to cross correlate the outputs from this tapped delay line with a locally generated code signal. It is noted that the

closest prior art, Toskala et al. (US Patent 6269126 B1) shows a transceiver, which transmits P signals, with means for symbol rate adaptation. However, Toskala et al. fail to disclose or render obvious the above underlined limitations as claimed.

10. References not relied upon in the office action but considered pertinent to the art are the following:

- a. U.S. Patent 6269126 B1 (Data Communications and Radio System): Toskala, Antti et al.
- b. U.S. Patent 6507603 B1 (CDMA Receiver): Haga, Yushinobu et al.
- c. U.S. Patent 6683906 B1 (Radio Communication Apparatus): Iwamatsu, Takanori
- d. U.S. Publication 2002/0039884 A1 (Radio Communication System): Raynes, Deborah L. et al.

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e. U.S. Patent 6480526 B1 (Spread Spectrum Receive Apparatus):

Shoki, Hiroki et al.

f. U.S. Publication 2002/0154705 A1 (High Efficiency High

Performance Communications System Employing Multi-Carrier

Modulation): Walton, Jay R. et al.

g. U.S. Patent 6496551 B1 (Method and Device in Radio

Communication System): Dam, Henrik et al.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay P. Patel whose telephone number is (571) 272-3086. The examiner can normally be reached on M-F 9:00 am - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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